



IFW

**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q87480

Shinji FUJIHARA, et al.

Appln. No.: 10/538,268

Group Art Unit: 2838

Confirmation No.: 3301

Examiner: Not yet assigned

Filed: June 10, 2005

For: BATTERY CHARGED CONDITION COMPUTING DEVICE AND BATTERY  
CHARGED CONDITION COMPUTING METHOD

**REQUEST FOR CORRECTED OFFICIAL FILING RECEIPT**

**ATTN:** Office of Initial Patent Examination

Filing Receipt Correction

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

We enclose a copy of the Official Filing Receipt for the above-identified application and request the following corrections:

**Applicants**

Shinji Fujihara, Hyogo, JAPAN

Kiyoharu Anzai, Tokyo, JAPAN

Motoshi Kiribayashi, Kyoto, JAPAN

Makoto Wanezaki, [Hyoto], JAPAN Makoto Wanezaki, Kyoto, JAPAN

Hideji Nakamura, [Hyoto], JAPAN Hideji Wanezaki, Kyoto, JAPAN

Toshiaki Hayashi, [Hyoto], JAPAN Toshiaki Hayashi, Kyoto, JAPAN

**Assignment for Published Patent Application**

JAPAN STORAGE BATTERY CO., LTD.

MITSUBISHI DENKI KABUSHIKI KAISHA

BEST AVAILABLE COPY

Verification for the requested corrections is indicated on the Assignment and Declaration filed June 10, 2005.

Respectfully submitted,

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

/Richard Turner/  
Richard C. Turner  
Registration No. 29,710

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: August 28, 2006



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/538,268	06/10/2005	2838	1260	Q87480	11	14	3

CONFIRMATION NO. 3301

CORRECTED FILING RECEIPT



\*OC000000019566882\*

23373  
 SUGHRUE MION, PLLC  
 2100 PENNSYLVANIA AVENUE, N.W.  
 SUITE 800  
 WASHINGTON, DC 20037

Date Mailed: 07/11/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

**Applicant(s)**

Shinji Fujihara, Hyogo, JAPAN;  
 Kiyoharu Anzai, Tokyo, JAPAN;  
 Motoshi Kiribayashi, Kyoto, JAPAN;  
 Makoto Wanezaki [Hyoto] JAPAN; *Kyoto*  
 Hideji Nakamura [Hyoto] JAPAN; *Kyoto*  
 Toshjaki Hayashi [Hyoto] JAPAN; *Kyoto*

*Assignment*

*JAPAN STORAGE BATTERY CO., LTD. ; MITSUBISHI DENKI KABUSHIKI*  
 Power of Attorney: The patent practitioners associated with Customer Number 23373. *KALSHA*

**Domestic Priority data as claimed by applicant**

This application is a 371 of PCT/JP03/15842 12/11/2003

**Foreign Applications**

JAPAN 2002-359718 12/11/2002

JAPAN 2003-279466 07/24/2003

If Required, Foreign Filing License Granted: 07/11/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/538,268**

Projected Publication Date: Not Applicable

Non-Publication Request: No

**Early Publication Request:** No

**Title**

Battery charging state arithmetic operation device and battery charging state arithmetic operation method

**Preliminary Class**

320

## **PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES**

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

---

### **LICENSE FOR FOREIGN FILING UNDER Title 35, United States Code, Section 184 Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier

license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

#### **NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

# DECLARATION AND POWER OF ATTORNEY FOR UTILITY OR DESIGN PATENT APPLICATION (37 C.F.R. 1.63)

## 実用・意匠特許出願宣言書および委任状 (37 C.F.R. 1.63)

### Japanese Language Declaration

私は以下の通り宣言します：

各発明者の住所、郵送先、および国籍は下記氏名の後に記載された通りです。

下記名称の発明に関し請求範囲に記載され特許出願がされている発明内容につき、下記に記載された発明者が本来かつ最初の発明者であると信じます。

---

---

---

---

---

☐ 上記発明の明細書は本書に添付されます。

または

☐ 上記発明は米国出願番号あるいは PCT 国際出願番号 \_\_\_\_\_ (確認番号 \_\_\_\_\_) として \_\_\_\_\_ 年 \_\_\_\_ 月 \_\_\_\_ 日に提出され、  
\_\_\_\_\_ 年 \_\_\_\_ 月 \_\_\_\_ 日に補正されました (該当する場合)。

私は補正が上に明示された場合は補正された特許請求範囲を含む前記明細書の内容を検討し、理解していることをここに表明します。

私は一部継続出願の場合先行出願の出願日から一部継続出願の国内あるいは PCT 国際出願日までの期間中に入手された重要な情報を含み、37 C.F.R. 1.56 に定義される特許性に肝要な情報について開示義務があることを認めます。

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

BATTERY CHARGING STATE ARITHMETIC  
OPERATION DEVICE AND  
BATTERY CHARGING STATE ARITHMETIC  
OPERATION METHOD

☐ the specification of which is attached hereto

OR

☐ was filed on 11 December, 2003  
as United States Application Number or PCT  
International Application Number PCT/JP03/015842  
(Confirmation No. \_\_\_\_\_),  
and was amended on \_\_\_\_\_  
(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for continuation-in-part application(s), material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.



## Japanese Language Declaration

私は 35 U.S.C. 119(a)-(d) あるいは (f), または 365(b) に基づき特許、発明者、あるいは植物育種家証書の下記外国出願、または 365(a) に基づきアメリカ合衆国以外の少なくとも 1 ヶ国を指定した下記 PCT 国際出願についての外国優先権特典をここに主張するとともに、下記項目に x 印を付けることにより優先権を主張する出願以前の出願日を有する特許、発明者、あるいは植物育種家証書の外国出願または PCT 国際出願を示します。

Prior Foreign Application Number(s)  
先行外国出願番号

JP2002-359718	JAPAN
(Application Number) (出願番号)	(Country) (国名)
JP2003-279466	JAPAN
(Application Number) (出願番号)	(Country) (国名)

私は 35 U.S.C. 119(e) に基づき下記の米国仮特許出願の国内優先権をここに主張します。

(Application Number) (出願番号)	(Filing Date) (出願日)
(Application Number) (出願番号)	(Filing Date) (出願日)

私は 35 U.S.C. 120 に基づき下記米国特許出願、あるいは 365(c) に基づき米国を指定する下記 PCT 国際出願の利益をここに主張し、本特許出願内特許請求範囲の各項目の内容が 35 U.S.C. 112 の最初の項に規定される方法により先行米国あるいは PCT 国際特許出願で開示されていない限りにおいて 37 C.F.R. 1.56 に定義される本出願の特許性に肝要で、先行特許出願の出願日から本特許出願の国内あるいは PCT 国際出願日までの期間中に入手された情報について開示義務があることを認めます。

Prior U.S. or International Application Number(s)  
先行米国あるいは国際出願番号

(Application Number) (出願番号)	(Filing Date) (出願日)
(Application Number) (出願番号)	(Filing Date) (出願日)

私は本宣言書内で私自身の知識に基づいてなされたすべての陳述が真実であり、情報および信ずるところに基づいてなされたすべての陳述が真実であると信じられていることをここに宣言し、さらに故意になされた虚偽の陳述等々は 18 U.S.C. 1001 に基づき罰金あるいは拘禁または両方による処罰にあたり、またかような故意による虚偽の陳述はそれに基づく特許出願あるいは成立特許の有効性を危うくする可能性があることを認識した上でこれらの陳述をなしたことを宣言します。

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application(s) which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application(s) having a filing date before that of the application on which priority is claimed.

Priority Claimed?  
優先権の主張？

Yes 有り	No 無し
<input checked="" type="checkbox"/>	<input type="checkbox"/>

11 December, 2002  
(Filing Date)  
(出願日)

24 July, 2003  
(Filing Date)  
(出願日)

<input checked="" type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------

I hereby claim domestic priority under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

I hereby claim benefit under 35 U.S.C. 120 of any United States application(s) or 365(c) of any PCT international application(s) designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in a listed prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge my duty to disclose any information material to the patentability of this application as defined in 37 C.F.R. 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(Status: patented, pending, abandoned)  
(状態: 特許成立済、係属中、放棄済)

(Status: patented, pending, abandoned)  
(状態: 特許成立済、係属中、放棄済)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

## Japanese Language Declaration

委任状：私は下記の米国特許商標局（USPTO）顧客番号のもとに記載される SUGHRUE MION 法律事務所のすべての弁護士を、同顧客番号のもとに記載される個々の弁護士は Sughrue Mion 法律事務所のための自由裁量に基づき変更され得ることを認識した上で、本特許出願の手続きおよびそれに関わる米国特許商標局との業務を遂行する弁護士として指名し、本特許出願に関するすべての通信が同 USPTO 顧客番号のもとに提出された住所宛に送付されることを要請します。

POWER OF ATTORNEY: I hereby appoint all attorneys of SUGHRUE MION, PLLC who are listed under the USPTO Customer Number shown below as my attorneys to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith, recognizing that the specific attorneys listed under that Customer Number may be changed from time to time at the sole discretion of Sughrue Mion, PLLC, and request that all correspondence about the application be addressed to the address filed under the same USPTO Customer Number.

### STATEMENT OF ACCURATE TRANSLATION IN ACCORDANCE WITH 37 C.F.R. §1.69(b):

The declaration and power of attorney is an accurate translation of the corresponding English language declaration and power of attorney.

Signature

Date

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

電話連絡は下記へ：

SUGHRUE MION, PLLC  
(202) 293-7060

Direct Telephone Calls to:

SUGHRUE MION, PLLC  
(202) 293-7060

#### NAME OF SOLE OR FIRST INVENTOR:

唯一あるいは第一の発明者名

Given Name (first and middle [if any]) 名 (名およびミドルネーム[該当する場合])	Shinji	Family Name or Surname 姓	FUJIHARA	
Inventor's signature 発明者の署名	Shinji Fujihara		Date 日付	May 18, 2005
Residence: 住所:	Hyogo, JAPAN		Citizenship 国籍	Japanese
Mailing Address: 郵送先:	c/o Mitsubishi Electric Control Software CO., Ltd. 1-2, Hamayama-dori 6-chome, Hyogo-ku, Kobe-shi, Hyogo 652-0871 JAPAN			

#### NAME OF SECOND INVENTOR:

第二の発明者名:

Given Name (first and middle [if any]) 名 (名およびミドルネーム[該当する場合])	Kiyoharu	Family Name or Surname 姓	ANZAI	
Inventor's signature 発明者の署名	Kiyoharu Anzai		Date 日付	May 21, 2005
Residence: 住所:	TOKYO, JAPAN		Citizenship 国籍	Japanese
Mailing Address: 郵送先:	c/o MITSUBISHI DENKI KABUSHIKI KAISHA 2-3, Marunouchi 2-chome, Chiyoda-ku, TOKYO 100-8310 JAPAN			



## NAME OF THIRD INVENTOR:

第三の発明者名:

Given Name (first and middle [if any]) 名(名およびミドルネーム[該当する場合])	Motoshi	Family Name or Surname 姓	KIRIBAYASHI
Inventor's signature 発明者の署名	Motoshi Kiribayashi	Date 日付	April 18, 2005
Residence: 住所:	Kyoto, JAPAN	Citizenship 国籍	Japanese
Mailing Address: 郵送先:	c/o JAPAN STORAGE BATTERY CO., LTD. 1, Inobaba-cho, Nishinosho, Kisshoin, Minami-ku, Kyoto-shi, Kyoto 601-8520 JAPAN		

## NAME OF FOURTH INVENTOR:

第四の発明者名:

Given Name (first and middle [if any]) 名(名およびミドルネーム[該当する場合])	Makoto	Family Name or Surname 姓	WANEZAKI
Inventor's signature 発明者の署名	Makoto Wanezaki	Date 日付	April 20, 2005
Residence: 住所:	Kyoto, JAPAN	Citizenship 国籍	Japanese
Mailing Address: 郵送先:	c/o JAPAN STORAGE BATTERY CO., LTD. 1, Inobaba-cho, Nishinosho, Kisshoin, Minami-ku, Kyoto-shi, Kyoto 601-8520 JAPAN		

## NAME OF FIFTH INVENTOR:

第五の発明者名:

Given Name (first and middle [if any]) 名(名およびミドルネーム[該当する場合])	Hideji	Family Name or Surname 姓	NAKAMURA
Inventor's signature 発明者の署名	Hideji Nakamura	Date 日付	April 18, 2005
Residence: 住所:	Kyoto, JAPAN	Citizenship 国籍	Japanese
Mailing Address: 郵送先:	c/o JAPAN STORAGE BATTERY CO., LTD. 1, Inobaba-cho, Nishinosho, Kisshoin, Minami-ku, Kyoto-shi, Kyoto 601-8520 JAPAN		

## NAME OF SIXTH INVENTOR:

第六の発明者名:

Given Name (first and middle [if any]) 名(名およびミドルネーム[該当する場合])	Toshiaki	Family Name or Surname 姓	HAYASHI
Inventor's signature 発明者の署名	Toshiaki Hayashi	Date 日付	April 30, 2005
Residence: 住所:	Kyoto, JAPAN	Citizenship 国籍	Japanese
Mailing Address: 郵送先:	23-502, Hozugawadanchi, 1-3, Kitakawaramachi, Kameoka-shi, Kyoto 621-0802 JAPAN		

## NAME OF SEVENTH INVENTOR:

第七の発明者名:

Given Name (first and middle [if any]) 名(名およびミドルネーム[該当する場合])		Family Name or Surname 姓	
Inventor's signature 発明者の署名		Date 日付	
Residence: 住所:		Citizenship 国籍	
Mailing Address: 郵送先:			

## Assignment

Whereas, I/We, **Shinji FUJIHARA**  
c/o Mitsubishi Electric Control Software CO., Ltd.23-502,  
1-2, Hamayama-dori 6-chome, Hyogo-ku, Kobe-shi, Hyogo 652-0871  
JAPAN

**Kiyoharu ANZAI**

c/o MITSUBISHI DENKI KABUSHIKI KAISHA  
2-3, Marunouchi 2-chome, Chiyoda-ku, TOKYO 100-8310 JAPAN

**Motoshi KIRIBAYASHI, Makoto WANEZAKI and Hideji NAKAMURA**  
c/o JAPAN STORAGE BATTERY CO., LTD.  
1, Inobaba-cho, Nishinosho, Kisshoin, Minami-ku, Kyoto-shi, Kyoto  
601-8520 JAPAN

**Toshiaki HAYASHI**

23-502, Hozugawadanchi, 1-3, Kitakawaramachi, Kameoka-shi, Kyoto  
621-0802 JAPAN

of hereinafter called assignor(s), have invented certain improvements in

**BATTERY CHARGING STATE ARITHMETIC OPERATION DEVICE AND  
BATTERY CHARGING STATE ARITHMETIC PERATION METHOD**

and executed an application for Letters Patent of the United States of America therefor on

; and Whereas, **JAPAN STORAGE BATTERY CO., LTD.**

1, Inobaba-cho, Nishinosho, Kisshoin, Minami-ku,  
Kyoto-shi, Kyoto 601-8520 JAPAN

**MITSUBISHI DENKI KABUSHIKI KAISHA**

2-3, Marunouchi 2-chome, Chiyoda-ku,  
TOKYO 100-8310 JAPAN

(assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director – U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee.

I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number \_\_\_\_\_ and Confirmation number \_\_\_\_\_)

\_\_\_\_\_, filed \_\_\_\_\_) the filing date  
and application number of said application when known.

Date: May 18, 2005 Shinji Fujihara  
s/ **Shinji FUJIHARA**

Date: May 21, 2005 Kiyoharu Anzai  
s/ **Kiyoharu ANZAI**

Date: April 18, 2005 Motoshi Kiribayashi  
s/ **Motoshi KIRIBAYASHI**

Date: April 20, 2005 Makoto Wanezaki  
s/ **Makoto WANEZAKI**

Date: April 18, 2005 Hideji Nakamura  
s/ **Hideji NAKAMURA**

Date: April 30, 2005 Toshiaki Hayashi  
s/ **Toshiaki HAYASHI**

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)